IN THE CLAIMS:

For the convenience of the Office, all pending claims, including those that are amendment, not amended or newly added, are shown hereinbelow:

Please **CANCEL** claims 2-6, 8-9 and 23-29

Please **AMEND** the claims as follows:

1. A turbo-molecular pump comprising:

a rotor;

a stator assembly surrounding said rotor; and

a casing portion surrounding said stator assembly,

wherein at least a partial clearance is formed between said stator assembly and said casing portion, so that, when an abnormal torque is applied from said rotor to said stator assembly, direct impact transmission is prevented from said stator assembly to said casing portion.

7. A turbo-molecular pump according to claim 1, wherein said stator assembly includes a groove pumping section spacer.

10. **(Amended)** A turbo-molecular pump according to claim 1, further comprising a slide facilitating member for facilitating said stator assembly to slide in a circumferential direction relative to said casing portion.

11. A turbo-molecular pump according to claim 10, wherein said slide facilitating member is a low friction member provided between said stator assembly and said casing portion.

12. A turbo-molecular pump according to claim 10, wherein said slide facilitating member is a support structure for rotatably supporting said stator assembly.

13. A turbo-molecular pump according to claim 1, wherein an impact absorbing member is provided between said stator assembly and said casing portion.

14. A turbo-molecular pump according to claim 1, wherein said stator assembly has a multiple structure c comprising stator vanes.

15. A turbo-molecular pump according to claim 1, further comprising a temperature adjusting mechanism for directly or indirectly heating or cooling said stator assembly.

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16. **(Amended)** A turbo-molecular pump comprising: a casing portion housing a stator and a rotor therein; and

a vane pumping section and/or a groove pumping section comprised by said stator and said rotor;

wherein an impact absorbing structure is provided in at least a part of said stator, so that, when an abnormal torque is applied from said rotor to said stator assembly, direct impact transmission is prevented from said stator, assembly to said casing portion.

17. A turbo-molecular pump according to claim 16, wherein said impact absorbing structure comprises an inner casing surrounding said vane pumping section and/or a groove pumping section.

18. A turbo-molecular pump according to claim 17, wherein a clearance is provided between said inner casing and said casing portion.

19. A turbo-molecular pump according to claim 17, wherein said inner casing is fixed by fitting a part of an inner surface or an outer surface of said inner casing to a cylindrical portion of said stator or to said casing portion.

20. A turbo-molecular pump according to any of claims 17 to 19, wherein said impact absorbing structure comprises a friction reducing mechanism provided between said inner casing and said stator or said casing portion.

21. **(Amended)** A turbo-molecular pump according to claim 17, wherein said impact absorbing structure comprises an impact absorbing member provided between said stator in said vane pumping section and/or groove pumping section and said inner casing.

22. A turbo-molecular pump according to claim 17, wherein said inner casing and/or said casing portion is comprised by a high thermal conductivity material.

30. A turbo-molecular pump according to claim 16, wherein said vane pumping section stator assembly is attached to said casing portion by way of a friction reducing mechanism.

31. A turbo-molecular pump according to claim 16, further comprising a temperature adjusting mechanism for directly or indirectly heating or cooling said stator portion in said vane pumping section and/or said groove pumping section.

32. A turbo-molecular pump according to claim 31, wherein said impact absorbing structure comprises an inner casing surrounding said vane pumping section and/or said groove pumping section, said temperature adjusting mechanism being provided on said inner casing.

PLEASE ADD THE FOLLOWING NEW CLAIMS 33-37:

33. **(Added)** A turbo-molecular pump according to claim 1, further comprising:

a sealing member provided between a portion of said stator assembly which is caused to be rotated by said abnormal torque, and a portion which is not rotated and is stationary.

34. **(Added)** A turbo-molecular pump according to claim 16, further comprising;

a sealing member provided between a portion of said stator assembly which is caused to be rotated by said abnormal torque, and a portion which is not rotated and is stationary.

35. **(Added)** A turbo-molecular pump comprising:

a casing portion housing a stator and a rotor therein;

a vane pumping section and a groove pumping section comprised by said stator and said rotor; and

a temperature adjusting mechanism provided between a downstream side of said vane pumping section and an upstream side of an exhaust port of said turbo-molecular pump.

36. **(Added)** A turbo-molecular pump comprising:

a casing portion housing a stator and a rotor therein;

a vane pumping section comprised by said stator and said rotor; and

a sealing member provided between said stator of said vane pumping section and said casing portion.

37. **(Added)** A turbo-molecular pump comprising:

a casing portion housing a stator and a rotor therein;

a groove pumping section comprised by said stator and said rotor; and

a. sealing member provided between said stator of said groove pumping section and said casing portion.